Billing Code: 4520-43-P

## **DEPARTMENT OF LABOR**

Mine Safety and Health Administration

Petitions for Modification of Application of Existing Mandatory Safety Standards

**AGENCY:** Mine Safety and Health Administration, Labor.

**ACTION:** Notice.

**SUMMARY:** This notice is a summary of petitions for modification submitted to the Mine Safety and Health Administration (MSHA) by the parties listed below.

**DATES:** All comments on the petitions must be received by MSHA's Office of Standards, Regulations, and Variances on or before [INSERT DATE 30 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit your comments, identified by "docket number" on the subject line, by any of the following methods:

- 1. <u>Electronic Mail:</u> zzMSHA-comments@dol.gov. Include the docket number of the petition in the subject line of the message.
  - 2. Facsimile: 202-693-9441.
- 3. <u>Regular Mail or Hand Delivery</u>: MSHA, Office of Standards, Regulations, and Variances, 201 12<sup>th</sup> Street South, Suite 4E401, Arlington, Virginia 22202-5452,

Attention: Sheila McConnell, Director, Office of Standards, Regulations, and Variances.

Persons delivering documents are required to check in at the receptionist's desk in Suite 4E401.

Individuals may inspect copies of the petition and comments during normal business hours at the address listed above.

MSHA will consider only comments postmarked by the U.S. Postal Service or proof of

delivery from another delivery service such as UPS or Federal Express on or before the deadline

for comments.

FOR FURTHER INFORMATION CONTACT: Sheila McConnell, Office of Standards,

Regulations, and Variances at 202-693-9440 (Voice), mcconnell.sheila.a@dol.gov (E-mail), or

202-693-9441 (Facsimile). [These are not toll-free numbers.]

**SUPPLEMENTARY INFORMATION:** Section 101(c) of the Federal Mine Safety and Health

Act of 1977 and Title 30 of the Code of Federal Regulations Part 44 govern the application,

processing, and disposition of petitions for modification.

I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the

mine operator or representative of miners to file a petition to modify the application of any

mandatory safety standard to a coal or other mine if the Secretary of Labor determines that:

1. An alternative method of achieving the result of such standard exists which will at all

times guarantee no less than the same measure of protection afforded the miners of such mine by

such standard; or

2. That the application of such standard to such mine will result in a diminution of safety

to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements and

procedures for filing petitions for modification.

II. Petitions for Modification

Docket Number: M-2019-025-C.

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<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: No. 88 Mine, MSHA I.D. No. 15-19400, located in Knott County, Kentucky.

Regulation Affected: 30 CFR 75.1002(a) (Installation of electric equipment and conductors; permissibility).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, within 150 feet of pillar workings and longwall faces.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372, 75.1002(a), and 75.1200, use of the most practical and accurate surveying equipment is necessary. It is necessary to determine the exact location and extent of mine workings to ensure the safety of miners in active mines and to protect miners in future mines which may mine in close proximity to the active mines.
- (2) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

(a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP)

rating of 66 or greater within 150 feet of pillar workings or longwall faces subject to this petition:

- TopCon GTS 233 W
- TopCon GPT 3003 LW
- TopCon GTS 223
- TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used within 150 feet of pillar workings or longwall faces will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and

- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn further than 150 feet from pillar workings and longwall faces. All requirements of 30 CFR 75.323 will be complied with prior to entering within 150 feet of pillar workings or longwall faces.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be

energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.

- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment within 150 of pillar workings and longwall faces, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used within 150 feet of pillar workings or longwall faces when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment within 150 feet of pillar workings and longwall faces. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the

surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air more than 150 feet from pillar workings or longwall faces. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, within 150 feet of pillar workings or longwall faces is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of

the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.

- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.

- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition. The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.
- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.

- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-026-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: No. 88 Mine, MSHA I.D. No. 15-19400, located in Knott County, Kentucky.

Regulation Affected: 30 CFR 75.500(d) (Permissible electric equipment).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in or inby the last open crosscut.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200, use of the most practical and accurate surveying equipment is necessary.
- (2) The operator utilizes the continuous mining method. Accurate surveying is critical to the safety of the miners at the mine.

- (3) Mechanical surveying equipment has been obsolete for a number of years. Such equipment of acceptable quality is not commercially available. Further, it is difficult, if not impossible, to have such equipment serviced or repaired.
- (4) Electronic surveying equipment is, at a minimum, 8 to 10 times more accurate than mechanical equipment.
- (5) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in or inby the last open crosscut, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.

- (d) All nonpermissible electronic surveying equipment to be used in or inby the last open crosscut will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in or inby the last open crosscut will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately

and withdrawn outby the last open crosscut. All requirements of 30 CFR 75.323 will be complied with prior to entering in or inby the last open crosscut.

- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within in or inby the last open crosscut, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in or inby the last open crosscut, methane tests will be made in accordance with 30 CFR 75.323(a).

  Nonpermissible electronic surveying equipment will not be used in or inby the last open crosscut when production is occurring.
- (I) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying

equipment in or inby the last open crosscut. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air outby the last open crosscut. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in or inby the last open crosscut, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in or inby the last open crosscut is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.

- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in or inby the last open crosscut. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic

surveying equipment used in or inby the last open crosscut, regardless of whether the equipment is used by the operator or by an independent contractor.

- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition.

  The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated

the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.
- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-027-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: No. 88 Mine, MSHA I.D. No. 15-19400, located in Knott County, Kentucky.

<u>Regulation Affected</u>: 30 CFR 75.507-1(a) (Electric equipment other than power-connection points; outby the last open crosscut; return air; permissibility requirements).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in return airways.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200(a), use of the most practical and accurate surveying equipment is necessary.
- (2) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in return airways, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or

purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.

- (d) All nonpermissible electronic surveying equipment to be used in return airways will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in return airways will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.

- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn out of return airways. All requirements of 30 CFR 75.323 will be complied with prior to entering in return airways.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment in return airways, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in return airways, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used in return airways when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.

- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment in return airways. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.
- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air out of return airways. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in return airways, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in return airways is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.

- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in return airways. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic

surveying equipment used in return airways, regardless of whether the equipment is used by the operator or by an independent contractor.

- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition.

  The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated

the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.
- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-028-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: No. 77 Mine, MSHA I.D. No. 15-09636, located in Perry County, Kentucky.

<u>Regulation Affected</u>: 30 CFR 75.1002(a) (Installation of electric equipment and conductors; permissibility).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, within 150 feet of pillar workings and longwall faces.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372, 75.1002(a), and 75.1200, use of the most practical and accurate surveying equipment is necessary. It is necessary to determine the exact location and extent of mine workings to ensure the safety of miners in active mines and to protect miners in future mines which may mine in close proximity to the active mines.
- (2) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater within 150 feet of pillar workings or longwall faces subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW

- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used within 150 feet of pillar workings or longwall faces will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.

- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn further than 150 feet from pillar workings and longwall faces. All requirements of 30 CFR 75.323 will be complied with prior to entering within 150 feet of pillar workings or longwall faces.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.

- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment within 150 of pillar workings and longwall faces, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used within 150 feet of pillar workings or longwall faces when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment within 150 feet of pillar workings and longwall faces. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.
- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air more than 150 feet from pillar workings or longwall faces.

  Replacement batteries will be carried only in the compartment provided for a spare battery in the

nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.

- (o) When using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, within 150 feet of pillar workings or longwall faces is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.

- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.

- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition. The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.
- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.
- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance

with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-029-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: No. 77 Mine, MSHA I.D. No. 15-09636, located in Perry County, Kentucky.

Regulation Affected: 30 CFR 75.500(d) (Permissible electric equipment).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in or inby the last open crosscut.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200, use of the most practical and accurate surveying equipment is necessary.
- (2) The operator utilizes the continuous mining method. Accurate surveying is critical to the safety of the miners at the mine.
- (3) Mechanical surveying equipment has been obsolete for a number of years. Such equipment of acceptable quality is not commercially available. Further, it is difficult, if not impossible, to have such equipment serviced or repaired.
- (4) Electronic surveying equipment is, at a minimum, 8 to 10 times more accurate than mechanical equipment.

(5) Application of the existing standard would result in a diminution of safety to miners.

Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in or inby the last open crosscut, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used in or inby the last open crosscut will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;

- (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in or inby the last open crosscut will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn outby the last open crosscut. All requirements of 30 CFR 75.323 will be complied with prior to entering in or inby the last open crosscut.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within in or inby the last open crosscut, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence

of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.

- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in or inby the last open crosscut, methane tests will be made in accordance with 30 CFR 75.323(a).

  Nonpermissible electronic surveying equipment will not be used in or inby the last open crosscut when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment in or inby the last open crosscut. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If

the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air outby the last open crosscut. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in or inby the last open crosscut, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in or inby the last open crosscut is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in or inby the last open crosscut. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA

Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.

- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used in or inby the last open crosscut, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.

- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition. The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.
- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.

- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-030-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: No. 77 Mine, MSHA I.D. No. 15-09636, located in Perry County, Kentucky.

<u>Regulation Affected</u>: 30 CFR 75.507-1(a) (Electric equipment other than power-connection points; outby the last open crosscut; return air; permissibility requirements).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in return airways.

The petitioner states that:

(1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200(a), use of the most practical and accurate surveying equipment is necessary.

(2) Application of the existing standard would result in a diminution of safety to miners.

Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in return airways, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used in return airways will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;

- (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in return airways will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn out of return airways. All requirements of 30 CFR 75.323 will be complied with prior to entering in return airways.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment in return airways, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal

dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.

- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in return airways, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used in return airways when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment in return airways. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air out of return airways. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in return airways, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in return airways is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in return airways. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.

- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used in return airways, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.

- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition. The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.
- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.
- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train

new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-031-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: Calvary No. 81 Mine, MSHA I.D. No. 15-12753, located in Leslie County, Kentucky. Regulation Affected: 30 CFR 75.1002(a) (Installation of electric equipment and conductors; permissibility).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, within 150 feet of pillar workings and longwall faces.

The petitioner states that:

(1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372, 75.1002(a), and 75.1200, use of the most practical and accurate surveying equipment is necessary. It is necessary to determine the exact location and extent of mine workings to ensure the safety of miners in active mines and to protect miners in future mines which may mine in close proximity to the active mines.

(2) Application of the existing standard would result in a diminution of safety to miners.

Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater within 150 feet of pillar workings or longwall faces subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used within 150 feet of pillar workings or longwall faces will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:

- (i) Checking the instrument for any physical damage and the integrity of the case;
- (ii) Removing the battery and inspecting for corrosion;
- (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn further than 150 feet from pillar workings and longwall faces. All requirements of 30 CFR 75.323 will be complied with prior to entering within 150 feet of pillar workings or longwall faces.

- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment within 150 of pillar workings and longwall faces, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used within 150 feet of pillar workings or longwall faces when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment within 150 feet of pillar workings and longwall faces. If there are two people in the

surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air more than 150 feet from pillar workings or longwall faces. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, within 150 feet of pillar workings or longwall faces is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment within

150 feet of pillar workings or longwall faces. A record of the training will be kept with the other training records.

- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces, regardless of whether the equipment is used by the operator or by an independent contractor.

- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition.

  The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.
- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-032-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: Calvary No. 81 Mine, MSHA I.D. No. 15-12753, located in Leslie County, Kentucky.

Regulation Affected: 30 CFR 75.500(d) (Permissible electric equipment).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in or inby the last open crosscut.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200, use of the most practical and accurate surveying equipment is necessary.
- (2) The operator utilizes the continuous mining method. Accurate surveying is critical to the safety of the miners at the mine.
- (3) Mechanical surveying equipment has been obsolete for a number of years. Such equipment of acceptable quality is not commercially available. Further, it is difficult, if not impossible, to have such equipment serviced or repaired.
- (4) Electronic surveying equipment is, at a minimum, 8 to 10 times more accurate than mechanical equipment.
- (5) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in or inby the last open crosscut, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.

- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used in or inby the last open crosscut will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.

- (g) The nonpermissible electronic surveying equipment used in or inby the last open crosscut will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn outby the last open crosscut. All requirements of 30 CFR 75.323 will be complied with prior to entering in or inby the last open crosscut.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within in or inby the last open crosscut, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in or inby the last open crosscut, methane tests will be made in accordance with 30 CFR 75.323(a).

Nonpermissible electronic surveying equipment will not be used in or inby the last open crosscut when production is occurring.

- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment in or inby the last open crosscut. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.
- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air outby the last open crosscut. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in or inby the last open crosscut, the surveyor will confirm by measurement or by inquiry of the person in charge of the

section, that the air quantity on the section, on that shift, in or inby the last open crosscut is at least the minimum quantity that is required by the mine's ventilation plan.

- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in or inby the last open crosscut. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations

and other electronic surveying equipment will be no older than 10 years from the date of manufacture.

- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used in or inby the last open crosscut, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted.

  Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all

ventilation controls are reestablished and are in compliance with approved ventilation or other

plans, and other applicable laws, standards, or regulations.

- Any disruption in ventilation will be recorded in the logbook required by the petition.

The logbook will include a description of the nature of the disruption, the location of the

disruption, the date and time of the disruption and the date and time the surveyor communicated

the disruption to the section foreman, the date and time production ceased, the date and time

ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be

involved with or affected by surveying operations will receive training in accordance with 30

CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes

final. The training will be completed before any nonpermissible electronic surveying equipment

can be used while production is occurring. The operator will keep a record of the training and

provide the record to MSHA on request.

- The operator will provide annual retraining to all personnel who will be involved with

or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train

new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train

experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance

with 30 CFR 48.6. The operator will keep a record of the training and provide the record to

MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no

less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-033-C.

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<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: Calvary No. 81 Mine, MSHA I.D. No. 15-12753, located in Leslie County, Kentucky. Regulation Affected: 30 CFR 75.507-1(a) (Electric equipment other than power-connection points; outby the last open crosscut; return air; permissibility requirements).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in return airways.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200(a), use of the most practical and accurate surveying equipment is necessary.
- (2) Application of the existing standard would result in a diminution of safety to miners. Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in return airways, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW

- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used in return airways will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.

- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in return airways will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn out of return airways. All requirements of 30 CFR 75.323 will be complied with prior to entering in return airways.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment in return airways, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.

- (k) Prior to energizing nonpermissible electronic surveying equipment in return airways, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used in return airways when production is occurring.
- (I) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment in return airways. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.
- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air out of return airways. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in return airways, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that

the air quantity on the section, on that shift, in return airways is at least the minimum quantity that is required by the mine's ventilation plan.

- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in return airways. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations

and other electronic surveying equipment will be no older than 10 years from the date of manufacture.

- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used in return airways, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted.

  Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all

ventilation controls are reestablished and are in compliance with approved ventilation or other

plans, and other applicable laws, standards, or regulations.

- Any disruption in ventilation will be recorded in the logbook required by the petition.

The logbook will include a description of the nature of the disruption, the location of the

disruption, the date and time of the disruption and the date and time the surveyor communicated

the disruption to the section foreman, the date and time production ceased, the date and time

ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be

involved with or affected by surveying operations will receive training in accordance with 30

CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes

final. The training will be completed before any nonpermissible electronic surveying equipment

can be used while production is occurring. The operator will keep a record of the training and

provide the record to MSHA on request.

- The operator will provide annual retraining to all personnel who will be involved with

or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train

new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train

experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance

with 30 CFR 48.6. The operator will keep a record of the training and provide the record to

MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no

less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-034-C.

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<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: Orchard Branch Mine No. 89, MSHA I.D. No. 15-19405, located in Perry County, Kentucky.

<u>Regulation Affected</u>: 30 CFR 75.1002(a) (Installation of electric equipment and conductors; permissibility).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, within 150 feet of pillar workings and longwall faces.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372, 75.1002(a), and 75.1200, use of the most practical and accurate surveying equipment is necessary. It is necessary to determine the exact location and extent of mine workings to ensure the safety of miners in active mines and to protect miners in future mines which may mine in close proximity to the active mines.
- (2) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

(a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP)

rating of 66 or greater within 150 feet of pillar workings or longwall faces subject to this petition:

- TopCon GTS 233 W
- TopCon GPT 3003 LW
- TopCon GTS 223
- TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.
- (d) All nonpermissible electronic surveying equipment to be used within 150 feet of pillar workings or longwall faces will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and

- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn further than 150 feet from pillar workings and longwall faces. All requirements of 30 CFR 75.323 will be complied with prior to entering within 150 feet of pillar workings or longwall faces.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rockdusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be

energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.

- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment within 150 of pillar workings and longwall faces, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used within 150 feet of pillar workings or longwall faces when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment within 150 feet of pillar workings and longwall faces. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the

surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air more than 150 feet from pillar workings or longwall faces. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, within 150 feet of pillar workings or longwall faces is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.
- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment within 150 feet of pillar workings or longwall faces. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of

the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.

- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic surveying equipment used within 150 feet of pillar workings or longwall faces, regardless of whether the equipment is used by the operator or by an independent contractor.
- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.

- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition. The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.
- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.

- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-035-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: Orchard Branch Mine No. 89, MSHA I.D. No. 15-19405, located in Perry County, Kentucky.

Regulation Affected: 30 CFR 75.500(d) (Permissible electric equipment).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in or inby the last open crosscut.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200, use of the most practical and accurate surveying equipment is necessary.
- (2) The operator utilizes the continuous mining method. Accurate surveying is critical to the safety of the miners at the mine.

- (3) Mechanical surveying equipment has been obsolete for a number of years. Such equipment of acceptable quality is not commercially available. Further, it is difficult, if not impossible, to have such equipment serviced or repaired.
- (4) Electronic surveying equipment is, at a minimum, 8 to 10 times more accurate than mechanical equipment.
- (5) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in or inby the last open crosscut, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.

- (d) All nonpermissible electronic surveying equipment to be used in or inby the last open crosscut will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in or inby the last open crosscut will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.
- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately

and withdrawn outby the last open crosscut. All requirements of 30 CFR 75.323 will be complied with prior to entering in or inby the last open crosscut.

- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment within in or inby the last open crosscut, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in or inby the last open crosscut, methane tests will be made in accordance with 30 CFR 75.323(a).

  Nonpermissible electronic surveying equipment will not be used in or inby the last open crosscut when production is occurring.
- (I) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.
- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying

equipment in or inby the last open crosscut. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.

- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air outby the last open crosscut. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in or inby the last open crosscut, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in or inby the last open crosscut is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.

- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in or inby the last open crosscut. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic

surveying equipment used in or inby the last open crosscut, regardless of whether the equipment is used by the operator or by an independent contractor.

- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition.

  The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated

the disruption to the section foreman, the date and time production ceased, the date and time ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be involved with or affected by surveying operations will receive training in accordance with 30 CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes final. The training will be completed before any nonpermissible electronic surveying equipment can be used while production is occurring. The operator will keep a record of the training and provide the record to MSHA on request.
- The operator will provide annual retraining to all personnel who will be involved with or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance with 30 CFR 48.6. The operator will keep a record of the training and provide the record to MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

Docket Number: M-2019-036-C.

<u>Petitioner</u>: Blue Diamond Coal Company, One Oxford Centre, 301 Grant Street, Suite 4300, Pittsburgh, Pennsylvania 15219.

Mines: Orchard Branch Mine No. 89, MSHA I.D. No. 15-19405, located in Perry County, Kentucky.

<u>Regulation Affected</u>: 30 CFR 75.507-1(a) (Electric equipment other than power-connection points; outby the last open crosscut; return air; permissibility requirements).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance to allow the use of battery-powered nonpermissible surveying equipment including, but not limited to, portable battery-operated mine transits, total station surveying equipment, distance meters, and data loggers, in return airways.

The petitioner states that:

- (1) To comply with requirements for mine ventilation maps and mine maps in 30 CFR 75.372 and 75.1200(a), use of the most practical and accurate surveying equipment is necessary.
- (2) Application of the existing standard would result in a diminution of safety to miners.

  Underground mining by its nature, size, and complexity of mine plans requires that accurate and precise measurements be completed in a prompt and efficient manner.

As an alternative to the existing standard, the petitioner proposes the following:

- (a) The operator may use the following total stations and theodolites and similar low-voltage battery-operated total stations and theodolites if they have an ingress protection (IP) rating of 66 or greater in return airways, subject to this petition:
  - TopCon GTS 233 W
  - TopCon GPT 3003 LW
  - TopCon GTS 223
  - TopCon GTS 243 NW
- (b) The nonpermissible electronic surveying equipment is low-voltage or battery-powered nonpermissible total stations and theodolites. All nonpermissible electronic total stations and theodolites will have an IP 66 or greater rating.
- (c) The operator will maintain a logbook for electronic surveying equipment with the equipment, or in the location where mine record books are kept, or in the location where the surveying record books are kept. The logbook will contain the date of manufacture and/or

purchase of each particular piece of electronic surveying equipment. The logbook will be made available to MSHA on request.

- (d) All nonpermissible electronic surveying equipment to be used in return airways will be examined by the person who operates the equipment prior to taking the equipment underground to ensure the equipment is being maintained in a safe operating condition. The result of these examinations will be recorded in the logbook and will include:
  - (i) Checking the instrument for any physical damage and the integrity of the case;
  - (ii) Removing the battery and inspecting for corrosion;
  - (iii) Inspecting the contact points to ensure a secure connection to the battery;
- (iv) Reinserting the battery and powering up and shutting down to ensure proper connections; and
- (v) Checking the battery compartment cover or battery attachment to ensure that it is securely fastened.
- (e) The equipment will be examined at least weekly by a qualified person, as defined in 30 CFR 75.153. The examination results will be recorded weekly in the equipment logbook and will be maintained for at least 1 year.
- (f) The operator will ensure that all nonpermissible electronic surveying equipment is serviced according to the manufacturer's recommendations. Dates of service will be recorded in the equipment's logbook and will include a description of the work performed.
- (g) The nonpermissible electronic surveying equipment used in return airways will not be put into service until MSHA has initially inspected the equipment and determined that it is in compliance with all the terms and conditions of this petition.

- (h) Nonpermissible electronic surveying equipment will not be used if methane is detected in concentrations at or above 1.0 percent. When 1.0 percent or more methane is detected while such equipment is being used, the equipment will be de-energized immediately and withdrawn out of return airways. All requirements of 30 CFR 75.323 will be complied with prior to entering in return airways.
- (i) Prior to setting up and energizing nonpermissible electronic surveying equipment in return airways, the surveyor(s) will conduct a visual examination of the immediate area for evidence that the area appears to be sufficiently rock-dusted and for the presence of accumulated float coal dust. If the rock-dusting appears insufficient or the presence of accumulated float coal dust is observed, the equipment will not be energized until sufficient rock-dust has been applied and/or the accumulations of float coal dust have been cleaned up. If nonpermissible electronic surveying equipment is to be used in an area not rock-dusted within 40 feet of a working face where a continuous mining machine is used, the area will be rocked-dusted prior to energizing the nonpermissible electronic surveying equipment.
- (j) All hand-held methane detectors will be MSHA-approved and maintained in permissible and proper operating condition, as defined in 30 CFR 75.320. All methane detectors will provide visual and audible warnings when methane is detected at or above 1.0 percent.
- (k) Prior to energizing nonpermissible electronic surveying equipment in return airways, methane tests will be made in accordance with 30 CFR 75.323(a). Nonpermissible electronic surveying equipment will not be used in return airways when production is occurring.
- (l) Prior to surveying, the area will be examined according to 30 CFR 75.360. If the area has not been examined, a supplemental examination according to 30 CFR 75.361 will be performed before any non-certified person enters the area.

- (m) A qualified person, as defined in 30 CFR 75.151, will continuously monitor for methane immediately before and during the use of nonpermissible electronic surveying equipment in return airways. If there are two people in the surveying crew, both persons will continuously monitor for methane. The other person will either be a qualified person, as defined in 30 CFR 75.151, or be in the process of being trained to be a qualified person but has yet to make such tests for a period of 6 months, as required in 30 CFR 75.150. Upon completion of the 6-month training period, the second person on the surveying crew must become qualified, as defined in 30 CFR 75.151, in order to continue on the surveying crew. If the surveying crew consists of one person, that person will monitor for methane with two separate devices.
- (n) Batteries contained in the nonpermissible electronic surveying equipment will be changed out or charged in fresh air out of return airways. Replacement batteries will be carried only in the compartment provided for a spare battery in the nonpermissible electronic surveying equipment carrying case. Before each shift of surveying, all batteries for the nonpermissible electronic surveying equipment will be charged sufficiently so that they are not expected to be replaced on that shift.
- (o) When using nonpermissible electronic surveying equipment in return airways, the surveyor will confirm by measurement or by inquiry of the person in charge of the section, that the air quantity on the section, on that shift, in return airways is at least the minimum quantity that is required by the mine's ventilation plan.
- (p) Personnel engaged in the use of nonpermissible electronic surveying equipment will be properly trained to recognize the hazards and limitations associated with the use of such equipment in areas where methane could be present.

- (q) All members of the surveying crew will receive specific training on the terms and conditions of the petition before using nonpermissible electronic surveying equipment in return airways. A record of the training will be kept with the other training records.
- (r) If the petition is granted, the operator will submit within 60 days after the petition is final, proposed revisions for its approved 30 CFR part 48 training plans to the District Manager. These revisions will specify initial and refresher training regarding the terms and conditions of the petition. When training is conducted on the terms and conditions in the petition, an MSHA Certificate of Training (Form 5000-23) will be completed and will indicate that it was surveyor training.
- (s) The operator will replace or retire from service any electronic surveying instrument that was acquired prior to December 31, 2004 within 1 year of the petition becoming final.

  Within 3 years of the date that the petition becomes final, the operator will replace or retire from service any theodolite that was acquired more than 5 years prior to the date that the petition becomes final or any total station or other electronic surveying equipment identified in this petition and acquired more than 10 years prior to the date that the petition becomes final. After 5 years, the operator will maintain a cycle of purchasing new electronic surveying equipment whereby theodolites will be no older than 5 years from the date of manufacture and total stations and other electronic surveying equipment will be no older than 10 years from the date of manufacture.
- (t) The operator will ensure that all surveying contractors hired by the operator are using nonpermissible electronic surveying equipment in accordance with the terms and conditions of this petition. The conditions of use in the petition will apply to all nonpermissible electronic

surveying equipment used in return airways, regardless of whether the equipment is used by the operator or by an independent contractor.

- (u) The petitioner states that it may use nonpermissible electronic surveying equipment when production is occurring, subject to the following conditions:
- On a mechanized mining unit (MMU) where production is occurring, nonpermissible electronic surveying equipment will not be used downwind of the discharge point of any face ventilation controls, such as tubing (including controls such as "baloney skins") or curtains.
- Production may continue while nonpermissible electronic surveying equipment is used, if such equipment is used in a separate split of air from where production is occurring.
- Nonpermissible electronic surveying equipment will not be used in a split of air ventilating an MMU if any ventilation controls will be disrupted during such surveying.

  Disruption of ventilation controls means any change to the mine's ventilation system that causes the ventilation system not to function in accordance with the mine's approved ventilation plan.
- If, while surveying, a surveyor must disrupt ventilation, the surveyor will cease surveying and communicate to the section foreman that ventilation must be disrupted. Production will stop while ventilation is disrupted. Ventilation controls will be reestablished immediately after the disruption is no longer necessary. Production will only resume after all ventilation controls are reestablished and are in compliance with approved ventilation or other plans, and other applicable laws, standards, or regulations.
- Any disruption in ventilation will be recorded in the logbook required by the petition.

  The logbook will include a description of the nature of the disruption, the location of the disruption, the date and time of the disruption and the date and time the surveyor communicated

the disruption to the section foreman, the date and time production ceased, the date and time

ventilation was reestablished, and the date and time production resumed.

- All surveyors, section foremen, section crew members, and other personnel who will be

involved with or affected by surveying operations will receive training in accordance with 30

CFR 48.7 on the requirements of the petition within 60 days of the date the petition becomes

final. The training will be completed before any nonpermissible electronic surveying equipment

can be used while production is occurring. The operator will keep a record of the training and

provide the record to MSHA on request.

- The operator will provide annual retraining to all personnel who will be involved with

or affected by surveying operations in accordance with 30 CFR 48.8. The operator will train

new miners on the requirements of the petition in accordance with 30 CFR 48.5, and will train

experienced miners, as defined in 30 CFR 48.6, on the requirements of the petition in accordance

with 30 CFR 48.6. The operator will keep a record of the training and provide the record to

MSHA on request.

The petitioner asserts that the proposed alternative method will at all times guarantee no

less than the same measure of protection afforded by the existing standard.

Sheila McConnell,

Director,

Office of Standards, Regulations, and Variances

[FR Doc. 2019-16839 Filed: 8/6/2019 8:45 am; Publication Date: 8/7/2019]

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